

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018735**Date Inspected:** 14-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr.Zhu Zhong Hai.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

NDT

OBG TRAL ASSEMBLY

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as OBG Traveler Rail Support. The weld designations reviewed are as follows.

TR1B-PP095-004,

TR1B-PP097-004,

TR1B-PP101-004,

TR1B-PP103-004,

TR1B-PP107-004,

TR1C-PP096-006,

NDT Notification No-07768

This QA Inspector performed randomly Visual Inspection and Ultrasonic Testing (UT) of approximately 10% of

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the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL-6027 (UT) report for this date. The member is identified as OBG Deck plate To Edge plate Inside CB 11DW. The weld designations reviewed are as follows.

SEG071*-045

SEG071*-046

NDT Notification No-07775

This QA Inspector observed the following work in progress:

OBG TRIAL ASSEMBLY

OBG Segment 12AE~12BE

This QA Inspector observed ZPMC qualified welding personnel identified as 050289 Perform Shielded Metal Arc Welding (SMAW) on OBG segment 12AE+12BE Bottom plate T rib hold back area. Joint identified as BP3001-001-065, 066. ZPMC QC Identified as Shi Lie. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2112-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 050289 Perform Shielded Metal Arc Welding (SMAW) on OBG segment 12AE+12BE Bottom plate T rib hold back area. Joint identified as BP3004-001-023, 024. ZPMC QC Identified as Shi Lie. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2112-FCM-1. For more information see below attached picture number 1.

OBG U Rib Splice plate Repair welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 046704 Perform Shielded Metal Arc Welding (SMAW) on OBG U Rib splice plate. Joint identified as USPL1-656-001 repair on U rib after Ultrasonic testing. ZPMC QC Identified as Zhao Peng with temporary welding repair report WRR-B-WR 19046. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-1G (1F)-Repair. For more information see below attached picture number 2.

OBG U Rib Splice plate Repair welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 046709 Perform Shielded Metal Arc Welding (SMAW) on OBG U Rib splice plate. Joint identified as USPL1-655-002 repair on U rib after Ultrasonic testing. ZPMC QC Identified as Zhao Peng with temporary welding repair report WRR-B-WR 19045. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-1G (1F)-Repair.

OBG Segment 12AE ~12BE

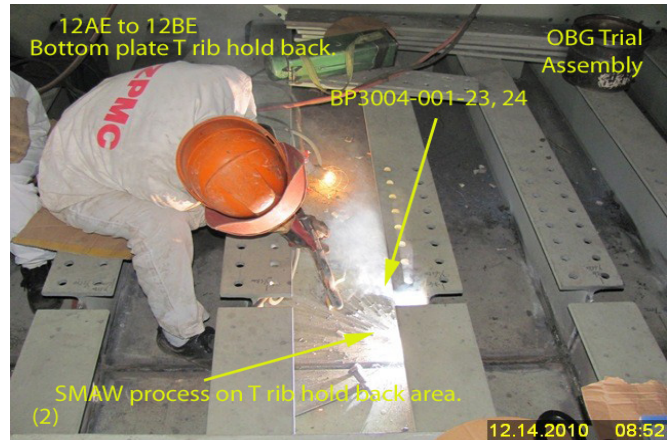
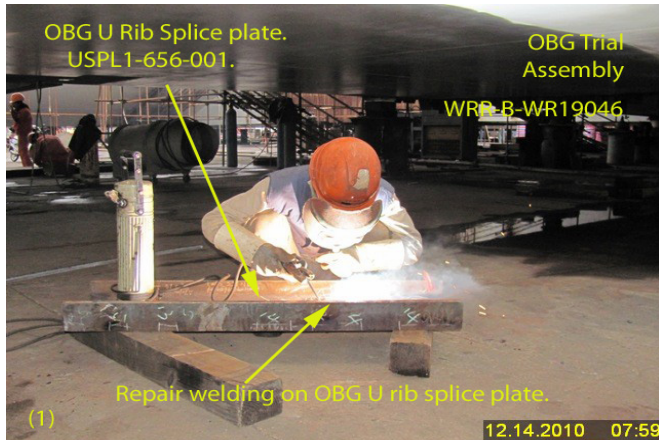
This QA Inspector observed ZPMC qualified welding personnel identified as 047353, 040458, 052763, 040367 Perform Flux Core Arc Welding (FCAW) on OBG segment 12AE+ 12BESide plate to side plate. Joint identified as OBE12D-003 and CA6502-008. ZPMC CWI Identified as An Qing Xing. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2233T-ESAB. For more

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information see below attached picture number 3.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone :150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad,Shailesh

Quality Assurance Inspector

Reviewed By: Carreon,Albert

QA Reviewer